

## CLAIMS

What is claimed is:

1. A reconfigurable pallet that supports a structure, comprising:  
a pallet base; and  
a plurality of modular stanchions having magnets therein to magnetically attach said modular stanchions to said pallet base along x and y axes relative to a top surface of said pallet base, said modular stanchions each including a support element having a height along a z axis that is transverse to said x and y axes, said support element supporting said structure.
2. The reconfigurable pallet of claim 1 wherein said support element is movable along said z axis to adjust said height.
3. The reconfigurable pallet of claim 2 further comprising a hydraulic pump in fluid communication with a support cylinder and operable to adjust a hydraulic pressure within said support cylinder to move said support element along said z axis.
4. The reconfigurable pallet of claim 1 wherein said modular stanchion further comprises a stanchion base that supports said support element.

5. The reconfigurable pallet of claim 4 wherein said stanchion base includes a permanent magnet that is embedded therein and that is selectively moved to a first position to secure said modular stanchion to said pallet base.

6. The reconfigurable pallet of claim 4 wherein said stanchion base includes an electro-magnet embedded therein, wherein a current is selectively applied to said electro-magnet to secure said modular stanchion to said base.

7. A pallet that is configurable to support first structure and reconfigurable to support a second structure, comprising:
  - a pallet base; and
  - a modular stanchion that is magnetically attachable to said pallet base and positionable along x and y axes relative to a top surface of said pallet base and that includes a support element having a height along a z axis that is transverse to said x and y axes, said support element having a first position to support said first structure and having a second position to support said second structure.
8. The pallet of claim 7 wherein said support element is movable along said z axis to adjust said height.
9. The pallet of claim 8 further comprising a hydraulic pump in fluid communication with a support cylinder and operable to adjust a hydraulic pressure within said support cylinder to move said support element along said z axis.
10. The pallet of claim 7 wherein said modular stanchion further comprises a stanchion base that supports said support element.
11. The pallet of claim 10 wherein said stanchion base includes a permanent magnet that is movable to a first position to secure said modular stanchion to said pallet base.

12. The pallet of claim 10 wherein said stanchion base includes an electro-magnet embedded therein, wherein a current is selectively applied to said electro-magnet to secure said modular stanchion to said pallet base.

13. A reconfigurable pallet that is configurable to support multiple structures, comprising:

a pallet base; and

a modular stanchion that comprises:

a stanchion base that is magnetically attachable to said pallet base along x and y axes relative to a top surface of said pallet base; and

a support element that is supported on said stanchion base and that has a height transverse to said x and y axes along a z axis, said support element having a first position to support a first structure and having a second position to support second structure.

14. The reconfigurable pallet of claim 13 wherein said support element is movable along said z axis to adjust said height.

15. The reconfigurable pallet of claim 13 further comprising a hydraulic pump in fluid communication with a support cylinder and operable to adjust a hydraulic pressure within said support cylinder to move said support element along said z axis.

16. The reconfigurable pallet of claim 13 wherein said stanchion base includes a permanent magnet that is movable to a first position to secure said modular stanchion to said pallet base.

17. The reconfigurable pallet of claim 13 wherein said stanchion base includes an electro-magnet embedded therein, wherein a current is selectively applied to said electro-magnet to secure said modular stanchion to said pallet base.

18. An assembly line for assembling a product, comprising:
- a plurality of operation stages; and
  - a pallet that supports a base structure of said product and that carries said base structure between operation stages, comprising:
    - a pallet base;
    - a stanchion base that is magnetically attachable to said pallet base along x and y axes relative to a top surface of said pallet base; and
    - a support element that is supported on said stanchion base and that has a height transverse to said x and y axes along a z axis, said support element locatable in a first position to support said base structure.
19. The assembly line of claim 18 wherein said support element is movable along said z axis to adjust said height.
20. The assembly line of claim 19 further comprising a hydraulic pump in fluid communication with a support cylinder and operable to adjust a hydraulic pressure within said support cylinder to move said support element along said z axis.
21. The assembly line of claim 18 wherein said stanchion base includes a permanent magnet that is movable to a first position to secure said modular stanchion to said pallet base.

22. The assembly line of claim 18 wherein said stanchion base includes an electro-magnet embedded therein, wherein a current is selectively applied to said electro-magnet to secure said modular stanchion to said pallet base.